

WHAT IS CLAIMED IS:

1. An electrophoretic display, comprising:
  - a substrate, and
  - at least one pixel disposed thereon
- 5 comprising electrophoretic particles and a dispersion medium or comprising the electrophoretic particles, the dispersion medium and a color filter layer,
  - wherein at least one of the electrophoretic particles, the dispersion medium and the color filter
- 10 layer constituting each pixel has a property of being colored a predetermined color by an external stimulus and said one of the electrophoretic particles, the dispersion medium and the color filter layer is changeable into a colored member by the external
- 15 stimulus.

  

2. A display according to Claim 1, wherein the colored member is at least one of the electrophoretic particles, the dispersion medium, and the color filter layer.
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3. A display according to Claim 1, wherein the colored member contains a dye which is colored by at least the external stimulus.
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4. A display according to Claim 3, wherein the

dye is encapsulated in a microcapsule.

5. A display according to Claim 3, wherein the  
dye has a property of assuming a plurality of  
5 different colors by at least one species of external  
stimulus.

6. A process for producing an electrophoretic  
display of the type wherein at least one pixel  
10 comprising electrophoretic particles and a dispersion  
medium or comprising the electrophoretic particles,  
the dispersion medium, a color filter layer is  
disposed on a substrate, said process comprising:

a step of providing a member, to be colored  
15 in a predetermined color by an external stimulus, as  
at least a part of members constituting said at least  
one pixel, and

a step of coloring the member to be colored  
by applying the external stimulus to the member.

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7. A process according to Claim 6, wherein the  
member to be colored is at least one of the  
electrophoretic particles, the dispersion medium, and  
the color filter layer.

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8. A process according to Claim 6, wherein said  
process further comprises a step of spatially sealing

hermetically the electrophoretic particles and the dispersion medium.

9. A process according to Claim 8, wherein the  
5 coloring step is performed after the hermetically sealing step.

10. A process according to Claim 6, wherein the external stimulus is selected from the group  
10 consisting of thermal energy, light energy, electron ray,  $\gamma$  ray, and X ray.

11. A process according to Claim 6, wherein said at least one pixel is a plurality of pixels.

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12. A process according to Claim 11, wherein a part of the plurality of pixels are shielded, and a remaining part of the plurality of pixels are supplied with the external stimulus.

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13. A process according to Claim 6, wherein the external stimulus is applied in a state that the electrophoretic particles and the dispersion medium are encapsulated in a microcapsule.

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